The Chronicle

of the Early American Industries Association, Inc.

Volume XII | September 1959 | Number 3

A RETURN TO WILLIAMSBURG

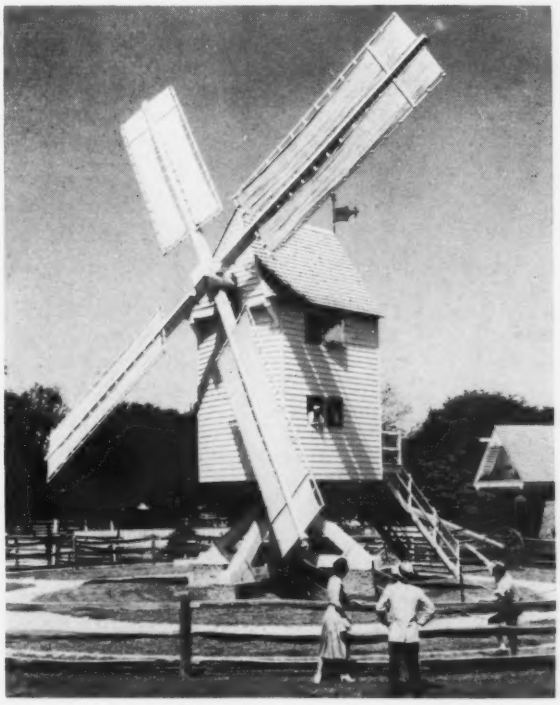
By Hugh DeSamper

When an anticipated 75-100 members of the Early American Industries Association gather for the organization's 15th Fall meeting in Williamsburg, Virginia, October 29 - November 1, they will find an unusually broad program of activities on tap for them, according to Program Co-Chairmen William D. Geiger and Raymond R. Townsend. Headquarters for the meeting will be the Williamsburg Lodge.

For some it will be an opportunity to revisit the restored 18th-century Virginia capital, which the group honored in 1953 with its ninth Fall meeting. For others it will be a first chance to take the special behind-the-scenes tours of the famous and picturesque restoration sponsored by John D. Rockefeller, Jr.

But regardless of how many times some members have toured Williamsburg, there will be activities and exhibits they have not seen. The highlight of the meeting will be the complete — for the first time — exhibition of the large and varied Stephen C. Wolcott Collection. Composed of over 3,000 tools of the 18th and 19th centuries and representing some 40 crafts, it was carefully assembled over a period of years by Mr. Wolcott, a founder of the E. A. I. A., Secretary of the Association, and the first editor of the *Chronicle*. Mrs. Wolcott presented the Collection to Colonial Williamsburg in 1938 after her husband's death.

Since that time, many 18th-century items of the Collection have been on display and in use in various craft shops of Colonial Williamsburg, notably the shops operated by the cabinetmaker and blacksmith. Many of the agricultural implements and tools of the domestic or household craftsman have been on display in their natural setting in the lumber house of George Wythe's home, in the scullery of the Governor's Palace and in the garden outbuilding of the Brush-Everard House.



Mr. William Robertson's Windmill.

In recent months, further activity has readied the remainder of the Collection for display in the Waters-Coleman Kitchen, off Duke of Gloucester Street near the Printing and Post Office. The building has been refurbished especially to serve as a home for this study portion of the Collection. It will be available for members' inspection from 8:30 - 10 p. m. on Friday, October 31, and all day Sunday, November 1. Robert H. Reveille of the Colonial Williamsburg staff, who supervised the cataloguing of the collection, will be on hand to discuss the various items with visitors during the exhibition hours.

The Colonial Williamsburg treament of many items of the Collection is considered unique, in that they are actually in use daily, whereas similar objects elsewhere are generally limited to exhibit-only status.

Another feature of the Williamsburg meeting will be a special drill of the colorful and proficient Williamsburg Militia Company, patterned after a county militia unit of the Virginia Regiment of 1754. Clad in their 18th-century workday costumes, with a scattering of authentic uniforms, the militiamen will hold muster, troop the colors, demonstrate the manual-at-arms and various

drill formations, and fire volleys from colonial flintlock muskets.

E. A. I. A. members will be given specific demonstration tours of seven Colonial Williamsburg craft shops. The participants will be divided into four groups and tours will be scheduled to allow maximum time in each shop without overcrowding. These tours will also include a visit to the Archaeological Laboratory, where a great number of artifacts of the 18th century may be seen, including whole or partial tools and implements unearthed during excavations of recent years.

To illustrate the type of craft demonstrations that will be conducted for E. A. I. A. members, Master Blacksmith John Allgood will hand-forge a plane iron for a jack plane, prepare it for use, insert it in a stock and shave wood with it. Other demonstrations equally interesting, will also be held.

Fall meeting participants will have an opportunity to see demonstrations of several crafts that existed on plantations in the 18th century but are not currently included in the craft program of Colonial Williamsburg. This exhibit will be held from 3:30 - 5 p. m. on Saturday, October 31, on the grounds of the George Wythe House. Skills to be shown include those of the wheelwright, cooper, shinglemaker and flaxbreaker.

There will, of course, be time for pursuit of the Association's "Whatsit Program" — the study of various unidentified antique objects with the aim of determining the period, type of object, and its use.

"Early-bird registration" will take place from 7-9 p. m. on Thursday, October 29, at the Williamsburg Lodge, with a B. Y. O. B. social planned from 8-10 p. m. at the Golden Horseshoe Club in the Williamsburg Inn. Registration will continue all day Friday, and the $18 registration fee will include two dinners, a luncheon and miscellaneous program and administration costs. Tour tickets to the exhibition buildings will be furnished by Colonial Williamsburg, and the host organization will also offer a reception in the East Lounge of the Williamsburg Inn at 6:15 p. m. Friday.

A thumb-nail run-down of the three-day program is as follows:

Friday, Oct. 30 — 9-10 a. m., Publications Committee Meeting, Williamsburg Lodge; 10:30 - 11:30 a. m., visit to Information Center to see the exhibits and the film, *Williamsburg—The Story of a Patriot;* 12:30 -1:30 p. m., luncheon at Williamsburg Lodge, Welcome by Carlisle H. Humelsine, President of Colonial Williamsburg;

Afternoon — 2-5 p. m., tours of craftshops, with specific demonstrations (Association members to be divided into four groups and visit six shops on rotation schedule); 5:15 - 5:30 p. m., muster and drill of the Williamsburg Militia Company on Market Square Green; 6:15 - 7:00 p. m., reception by Colonial Williamsburg, East Lounge of Williamsburg Inn; 7:00 - 8:30 p. m., dinner, Williamsburg Lodge; 8:30 - 10:00 p. m., Wolcott Collection open for inspection at Waters-Coleman Kitchen.

Saturday, Oct. 31 — 8 - 9 a. m., Directors' breakfast meeting, Lodge; 9 a. m. - 12 noon, tours of craft shops, again by groups; 1: 30 - 3:30 p. m. tours of Archaeological Laboratory and the Printing and Post Office, by groups; 3:30 - 5:00 p. m., demonstration of plantation crafts at George Wythe House; 7 - 10 p. m., banquet, Williamsburg Lodge, speaker, Dr. Edward M. Riley, Director of Research, Colonial Williamsburg.

Sunday, Nov. 1 — free time for leisurely tour of

Master Silversmith, William DeMatteo, at work in his shop, the Golden Ball.

The Abby Aldrich Folk Art Collection.

major exhibition buildings, inspection of Wolcott Collection, "Whatsit" discussions, or spontaneous innovations.

Returnees to Williamsburg who are making their first trip since the last meeting here will find many additions to investigate. Many will remember observing the formal opening of the Raleigh Tavern Bake Shop, set to coincide with the 1953 meeting. It became the ninth operating craft shop in a program that has now grown to a dozen shops. Association members also had a preview of the Silversmith Shop that was to open months later, and will want to see the finished operating shop.

Since that time, The Margaret Hunter Shop, an 18th-century millinery exhibit, has been re-opened in the restored building where such a shop once catered to the ladies of Williamsburg and surrounding plantations. A costumed milliner fashions and decorates hats of truscan and leghorn straw, and counters are piled high with substantial and eye-catching fabrics such as those once imported from England. The shop also carries soap, buttons, fans, perfumes, pheasant tails, ostrich plumes, pill boxes, and other colonial-type wares.

A familiar landmark of colonial times, Robertson's Windmill, has been reconstructed east of the Governor's Palace. When the wind is willing, the master miller grinds and sacks corn meal suitable for baking, and is seldom able to keep up with the demand. The mill is a post mill, so-called because the whole superstructure revolves and is suspended on a single sturdy post hewn from ancient timber. The superstructure has two levels; the upper chamber with the main shaft and millstones, and the lower chamber, which holds the screening and sacking machinery. A small storeroom is adjacent to the mill, where a record of the day's grinding is kept and where the meal is stored until sold. Robertson's Windmill is considered one of the most picturesque sights in Williamsburg.

In 1957 the Spinning and Weaving Shop, a domestic craft exhibit, was moved from a tiny building on the George Wythe House property to a more spacious building adjacent to the John Greenhow Store on Duke of Gloucester Street. Here, a large front room, a back room, back porch and yard permit a more complete demonstration of the weaving operation from the breaking of the flax and spinning of thread on the flaxwheel to the weaving of linen cloth and linsey woolsey on the loom. Addition of a second loom for wool weaving was made possible by the larger spaces.

In 1958, a newly reconstructed Printing and Post Office was opened on the site of William Parks' *Virginia Gazette*, first newspaper published in the Virginia Colony. The printer and bookbinder moved their craft operations from a temporary shop to this more historic ground, acquired by Colonial Williamsburg on long-term lease that permitted the reconstruction of the buildings at that location. A feature of the new facility is a postal headquarters, reminiscent of the day when the colonial printing office was an important way station for postal riders passing through from the north and south. Today, letters and cards may be mailed here, receiving a hand-stamped postmark patterned after one used in Williamsburg in 1771.

A major project was completed early in 1957 when the spacious, modern new Information Center was opened to the public. Located outside the restored area but within eye-view of the Governor's Palace, the Information Center features twin 250-seat theatres and a dramatic, action-packed orientation film, *Williamsburg - The Story of a Patriot*. The theatres were specially designed to project the horizontal VistaVision, Todd-AO sound, Technicolor film, made in Williamsburg in May, 1956, by Paramount Pictures Corporation.

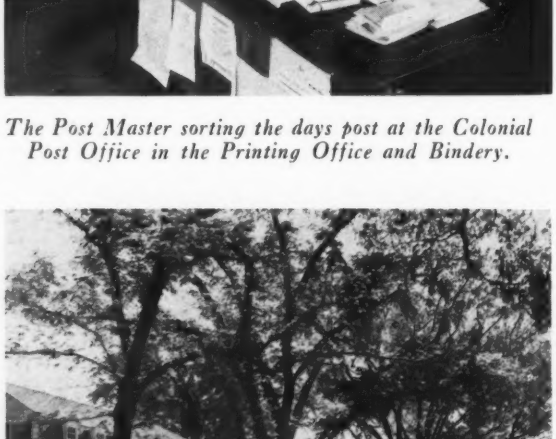
No limited-budget production, "The Patriot" was

Master Bookbinder, C. C. Samford, executes a design on the leather cover of a book bound by him.

The Colonial Williamsburg Militia Company salutes the Royal Governor on Palace Green.

Mistress Bonnie Brown at her loom in the Spinning House.

The Post Master sorting the days post at the Colonial Post Office in the Printing Office and Bindery.



Christiana Campbell's Tavern, Colonial Williamsburg's newest eighteenth century restaurant facility.

directed by George Seaton of 'Miracle on 34th Street" and "The Country Girl" fame. The majority of the speaking parts were taken by professional actors from the theatre and television, but hundreds of costumed extras were recruited from the Williamsburg population. The film, 35 minutes in length, is shown in both theatres on an overlapping schedule, greatly reducing the waiting time. It is regarded as an excellent film by authorities in many different fields.

Elsewhere in the Information Center are various exhibits depicting the conception and growth of Colonial Williamsburg, the style of architecture, the methods of documentary and archaeological research that were pursued, and many other fascinating aspects of the restoration organization. Nearby is The Motor House, a 218-room visitor facility, and a 400-seat cafeteria designed for the traveling families of America. Parking spaces for 1000 automobiles complete the area.

Another activity opened in 1957 is the Abby Aldrich Rockefeller Folk Art Collection, located in its new, permanent home between the Williamsburg Inn and Lodge. Nine galleries show the Collection at its best, and the building is also the site for special shows during the year. The Collection maintains a traveling exhibit that is currently at the Henry Ford Museum, Dearborn, Mich., (through Oct. 16) and will open at the City Museum in St. Louis on Nov. 5.

Returnees to Williamsburg will recall the delightful 18th-century eating places, King's Arms Tavern and Chowning's Tavern. There is now a third colonial restaurant, Mrs. Campbell's Tavern. Opened in 1956, it is located behind the Capitol on Waller Street, in a section of the restored area that has been undergoing considerable restoration and reconstruction in recent years.

Christiana Campbell advertised in the *Virginia Gazette* in 1771 that she had "opened TAVERN in the House behind the Capitol . . . where those Gentlemen who please to favour me with their Custom may depend upon genteel Accommodations, and the very best Entertainment. . . ." Many of the legislators did favor her, and George Washington frequently noted in his diary that he "dined and spent the evening at Mrs. Campbell's." Today as a steak and seafood house, Mrs. Campbell's specializes in such dishes as crab ravigote, sea squab with almond butter sauce, tipsy squire and rum cream pie.

Along the various streets of Williamsburg, E.A.I.A. members will find other changes in the scene: the restoration of the Powell-Waller and Norton-Cole House and the John Coke Office; completion of Mrs. Reynolds' House and other structures on the printing office property, and various other smaller buildings throughout the restored area. Current reconstruction work is being done at the stables of the Governor's Palace. Some will also note a vacant lot near Bruton Parish Church, where the 19th-century Maupin Shop stood until recently.

For those who have not yet visited Williamsburg, the three-day weekend, well-spiced with E.A.I.A. business, will serve only to whet their appetites for their next visit. Restored over a period of 33 years at a cost approximating 63 million dollars, the 18th-century capital features such popular exhibition buildings as the Governor's Palace and gardens, the Capitol, Raleigh Tavern, George Wythe House, Brush-Everard House, Public Gaol, Public Magazine and Guardhouse, Bruton Parish Church and the Wren Building of the College of William and Mary.

The entire project encompasses 132-acres, and includes more than 80 acres of gardens and greens. Some 83 original buildings have been restored and over 420 have been reconstructed after painstaking historical and archaeological studies.

The exhibition buildings and the 12 craft shops, taverns operated as they were in George Washington's day, and faithfully restored homes, shops and inns recall the life and times of the early Americans who helped to establish a free and independent country. Through the physical restoration and the "life-on-the-scene" activities that are a growing feature of Williamsburg, the 18th-century capital is dedicated to the motto 'That the Future May Learn from the Past."

Bakers Valentine and Givens preparing the days "good white bread."

NOTES ON FALL MEETING

Early in September, the Co-Chairmen of the Fall Meeting at Colonial Williamsburg, mailed a double post card to the membership of the Early American Industries Association outlining the highlights of the meeting and requesting information from each member as to his intentions in regard to the meeting. This issue of the Chronicle, will contain a full description of the meeting in an article prepared by Mr. Hugh DeSamper of the Colonial Williamsburg Public Relation Staff. In addition Mr. DeSamper has prepared a press release about the Association and the meeting. This release has been mailed to some 150 newspapers and about 50 historical societies. Dr. Sabin, our president, has requested the Directors call on their local papers to try to insure publication of this information.

The program for the meeting will include a variety of activities and is so scheduled that free time is available to members on Sunday, November 1, 1959. Headquarters for the meeting will be at the Williamsburg Lodge although some members are staying at the Williamsburg Inn. This represents no problem since the two hotels are within one block of each other. Members are urged to make their reservations directly or through the Editors by means of the advanced registration cards. Those members who have asked the Editors for reservations at Colonial Williamsburg hotels will receive a confirmation from the hotel and a request for a deposit which should be forwarded directly to the hotel.

When members register on Thursday night or on Friday they will receive a packet with a program, other information on Williamsburg, name badge, and group assignment. Badges must be worn for all daytime activities as they constitute your ticket of admission which is provided without charge by Colonial Williamsburg. We shall do all in our power to arrange groups in accordance with advance reservations so that members in one party are together. Reservations which are not made in advance or which are late cannot be afforded the same consideration. Groups are to be kept to a maximum of 20 people and a leader will be assigned. It is important to stay with your group and be familiar with the program and assembly.

Members are offered a chance to see the Wolcott Study Collection in its new storage and study area on Friday evening and on Sunday morning. However, the collection will be on display all day on Sunday.

Master Printer A. R. Klapper inking a form with inking stocks on the bed of his original press.

Central Information area of Colonial Williamsburg's new Information Center.

The Chronicle

SOME NOTES ON PLANES

By Mills Brown

(This article is a portion of the Research Report on Cabinetmaking prepared by Mr. Mills Brown of the Research Staff of Colonial Williamsburg and is one of a series of five reports completed in the field of the Crafts. A number of reports dealing with such matters are scheduled for the future.)

Probably the colonial cabinetmaker spent as much time with a plane in his hands as with any other tool. The stuff with which he worked came to him only rough-sawed, and he had a great deal of planing to do before it was smoothed, leveled, and squared at edges and ends. Still more planing was required to make certain types or decoratively shaped edges.

To perform these various planing tasks, the craftsman had three basic groups of planes: the bench planes for smoothing, leveling, and squaring; the fitting planes for making rebates, tongues, grooves, and other special shapes; and the molding planes for producing ornamental trim. The bench planes consisted of the jointer, trying plane, long plane, fore plane, jack plane, strike block, and smoothing plane. The fitting planes were the rabbet plane of several forms, the plow, the tongue, the filister and moving filister, and match planes. The molding planes were almost infinite in variety, according to the shapes they produced, but all were basically similar. In addition, there were a number of special purpose planes: hollows and rounds, nosing planes, raising planes, and others.

The eighteenth-century cabinetmaker had excellent planes of all three types and many of them. The body of the ordinary bench plane consisted of a rectangular block of wood, several times as long as wide and very nearly square in cross-section. Near the center of the body an opening penetrated through it from top to bottom but not quite from side to side. At the bottom, or sole, of the plane, this opening, the mouth, was a mere slit, but at the top it was quite wide. The rear surface of the opening was flat and was made at a definite angle, usually of about forty-five degrees. The plane iron rested on this surface and was held in place, with its cutting edge projecting slightly through the mouth, by a wooden wedge. Handles were sometimes provided, but the essentials of the plane were simple: body, iron, and wedge. The backing iron is thought by some authorities to be a nineteenth-century development, but there are eighteenth-century references to double-iron planes, and double iron was the common nineteenth-century term for a plane with a backing iron.[42] Beech was the wood most commonly used in English and American planes, although planes made of other hard woods—maple, apple, boxwood, ebony, even mahogany—were not unknown.[43]

Most English and American bench planes of the seventeenth, eighteenth and early nineteenth centuries look pretty much alike, and, in the absence of makers' stamps or other positive identification, it is difficult to assign them to the proper century. Double iron planes apparently were not made until fairly late in the eighteenth century, but single iron planes were still being made late in the nineteenth. Moreover, since planes were made of wood and their owners were frequently skilled woodworkers, it is possible that many single iron planes were modified to accept double irons when the advantages of the latter became apparent. Mercer's opinion was that the hollow grasp handle on the larger bench planes did not appear until about the middle of the eighteenth century or a bit later,[44] but the simpler handles did not disappear immediately. And again, the skilled woodworker could easily modify his planes if the advantages of the hollow grasp seemed sufficiently important to him.

It would be convenient to be able to identify certain bench planes as the basic bench planes employed by most cabinetmakers, but at this point the authorities begin to differ. The discussion that follows will consider the bench planes in order of their length, since this is the most obvious means of identifying them, and will point out the areas of disagreement concerning them.

The jointer. The longest of the bench planes, about twenty-seven to thirty inches, the jointer was used for working the surface of stuff smooth and level but was especially intended for shooting edges perfectly straight and square preparatory to jointing. The plane itself was carefully made so that its sole was exactly square and true, and the iron was always set quite fine. The great length of the jointer aided the craftsman in planing level surfaces and straight edges. Moxon, Diderot, Roubo, and Chambers all regarded the jointer as a basic bench plane, but Mercer apparently felt it was only a specialized form of the trying plane.[45]

The long plane. Very similar to the jointer, this plane was about twenty-four to twenty-six inches long. Only Chambers and Mercer mentioned the long plane. Chambers described it as the plane used — after the stuff had received a preliminary dressing with the jack plane— to smooth off the irregularities left by that tool and prepare the stuff for the jointer (for edge work) and the smoothing plane (for surface work).[46] Mercer called it another special form of trying plane but did not assign it any particular function.[47]

The fore plane or trying plane. A considerable amount of confusion surrounds this term, "fore plane." In seventeenth-century England, the fore plane was the same plane as the jack plane. Moxon said: *"Jack-Plane,* called so by Carpenters, but is indeed the same that Joyners called the *Fore-Plane . . ."*[48] This plane was used on the rough stuff to prepare it for the jointer or the smoothing plane.[49] *The Oxford English Dictionary* makes it clear that until the middle of the nineteenth century, at least, fore plane and jack plane were still interchangeable terms and referred to the plane used first on rough material—in complete agreement with Moxon.[50] Peter Nicholson and other English authorities, however, indicate that by early in the nineteenth century the preferred name for this first-used plane was jack plane. At about the same time there first appeared in publications the term "trying-plane." The trying plane was the plane used after the jack plane to accomplish further smoothing.[51] The use of the term fore plane to describe any sort of a plane seems to have disappeared in England about the middle of the nineteenth century; it is not to be found in English technical publications or tool catalogues

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The Chronicle

Early American
Industries Association, Inc.

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men, and other workers.

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Communications regarding the contents of *The Chronicle* and back issues should be addressed to the Editors; suggestions for members to John P. Fox ;all other matters to the President Address as here given.

DUES

The annual dues are payable on January 1st and are $5.00. The *Chronicle* is published quarterly and is sent to all members without additional charge. Printed on the press of The *Virginia* Gazette, founded 1736, *Williamsburg, Virginia.*

PRESIDENT'S MESSAGE

Many of the members of the EAIA have in their possession fine collections of tools that they have enjoyed hunting, searching and bargaining for over the many years. The article in the Anniversary Issue of The Chronicle Volume XI, October, 1958, number 3, writes of our members who have placed their collections in museums where they are displayed, used and thus fulfill the mission of carrying on the work of preserving the history of our early American Industries. We refer to the William B. Sprague Collection, now being displayed at the Farmer's Museum, Cooperstown, New York; The Frank H. Wildung Collection, now housed in the Shelburne Museum, Shelburne, Vermont; The Stephen C. Wolcott Collection, now being used in some of the Craft Shops of Colonial Williamsburg, Williamsburg, Virginia; and the George M. Simmons Collection now being prepared for display at the Staten Island Historical Society, Richmondtown, Staten Island, New York.

It is our earnest plea that the members who have collections, either small or large, make some plan to see that they will be cared for in the future. Never underestimate your collection, it probably contains items that some museum in our country would be delighted to have on display. Choose your museum, write them, let them know what you have, and that in the future you would be willing to donate your collection. By this means provide for the care of your collection so that it may be preserved and further the aims and ideals of our Early American Industries Association.

Fred C. Sabin
President

OLD SAUGUS, MASSACHUSETTS

Over one hundred thirty members and friends attended the Spring Meeting of the EAIA at Old Saugus, Massachusetts. Mr. J. Sanger Attwill, Chairman of this meeting is to be highly commended for the success of another meeting of our Association.

A most impressive tour of the Old Iron Works was made by the members who were given the opportunity to see the Works in actual operation by water power. A leisurely tour through the Peabody Museum afforded the members the opportunity to view the many fine exhibits housed there and the "Whatsit" collections placed on view for identification by our members, dwindled to practically none after our EAIA experts classified them.

A most interesting illustrated talk was given by Colonel Edward Clark (ret) of the Salem Peabody Museum on Whales, Whaling Methods, and Scrimshaw. This was by far one of the finest lectures our members have ever attended.

A successful auction was held under the leadership of Chairman Sid Stewart and the fine auctioning of Fred Wise. The sales grossed nearly $1100 of which the EAIA received $560 to add to its treasury.

It is with deep regret that the Editors of the Chronicle have learned of the deaths of the following members:

Mr. John Kenneth Byard, Norwalk, Connecticutt.
Mr. Frank D. Peirce, Leicester, Massachusetts.
Mrs. Stephen C. Wolcott, Santa Barbara, California.

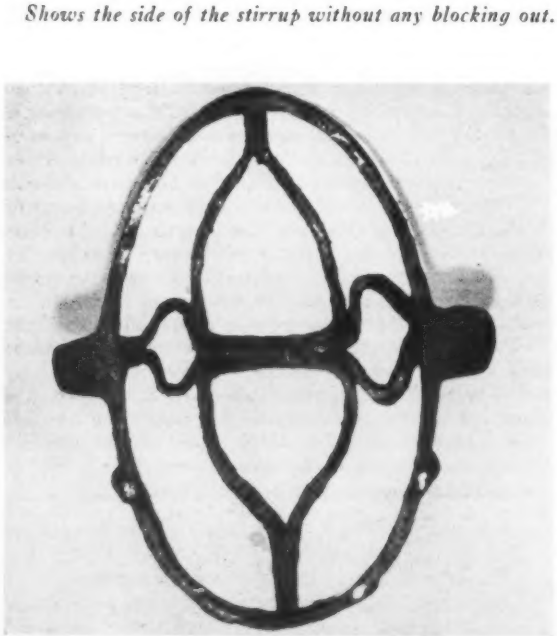
The Chronicle

SOME INTERESTING STIRRUPS

Edward Durell

Some twenty-five years ago when I was browsing along old Third Avenue in New York, I found an antique dealer who was just about to close his shop for the day. However, he stayed open long enough for me to take a look around and in one corner I found a collection of what, for lack of a better name, I have called basket stirrups.

Shows the side of the stirrup without any blocking out.



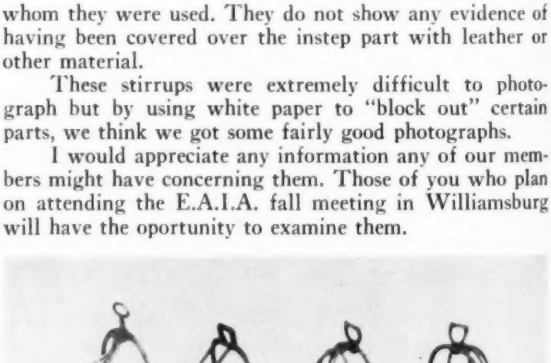
Bottom of the same stirrup.

These stirrups are all iron and many show beautiful blacksmithing work. Although they have been on exhibit in our museum, and even though I have shown them to a number of people, I have never been able to find out anything about their source or particular use; or where or by whom they were used. They do not show any evidence of having been covered over the instep part with leather or other material.

Same stirrup from the front with back part blocked out.

These stirrups were extremely difficult to photograph but by using white paper to "block out" certain parts, we think we got some fairly good photographs.

I would appreciate any information any of our members might have concerning them. Those of you who plan on attending the E.A.I.A. fall meeting in Williamsburg will have the oportunity to examine them.



Side view of eight stirrups with nothing blocked out.

(Additional pictures on Page 36)

THE BARLOW KNIFE

The Editors of the Chronicle apologize for the several errors that appeared in the fine article on *The Barlow Knife,* by Laurence A. Johnson, in the last issue, Volume XII, June, 1959, number 2.

On page 18, first column, line 17, the date the John Russel Company first made these famous knives was in 1875, (not 1785).

On page 18, first column, line 22 should read from 1875 (not 1775) up until World War II.

On page 18, second column, line 27, the mark used by the famiy on these knives was the simple arrangement BAR
LOW (not BAR).

On page 21, line 34, Mr. Adolph Castor's name should have been Mr. Adolph Kastor.

Mr. Johnson wrote us that some writers quote that Mark Twain mentioned the Russel Barlow knife in his books, *Tom Sawyer & Huckleberry Finn,* but that he found no reference to the word Russel in either book.

We received a very interesting letter from Mr. Alfred B. Kastor, Honorary Chairman of the Board of Camillus Cutlery Company, Camillus, New York in regard to Barlow knives which we quote in part:

"It might interest you to know that the old firm of Adolph Kastor and Brothers — and this goes back to my boyhood, were the sole agents of Joseph Allen & Sons of Sheffield, England, who produced the NON-XLL Barlow; Adolph Kastor and Brothers aso sold Butler Brothers the one-blade Barlows in quantities of 100 gross at a time and, believe it or not, the price was $4.85 per *gross,* not dozen. Those were the days of the good five-cent cigar."

"The trade markes, XL NT and A. W. Wadsworth & Son, are still owned by the Kastor family, and I do not suppose I have to tell you that the Camillus Cutlery Company is a member of the Committee to Ban Teen Age Weapons; our testimony before a Congressional Committee was largely responsible for the so-called anti-switchblade knife law, signed last August by President Eisenhower, which outlawed the introduction or manufacture for introduction into interstate commerce of switchblade knives. We have never made any of these so-called switchblade knives. The pocket knife is for peaceful and practical usage and has a venerable and honorable history, and the Camillus Cutlery Company will continue to do its part in maintaining its historic reputation. I am the son of the founder, and have been in this business continuously since 1906."

A REPORT ON THE PUBLICATIONS PROGRAM

At the Fall meeting of the Early American Industries Association at the Henry Ford Museum and Greenfield Village in 1958 an E. A. I. A. Publications Committee was formed. The purpose of the Committee is to investigate the possibilities of preparing suitable publications in the field encompassed by our association. At the Spring Meeting in 1959 at Old Saugus a lengthy meeting of this Committee was held and a number of steps were taken which are significant in this program of developing

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Some Notes on Planes

(Continued from Page 30)

of the late nineteenth or twentieth centuries.

In America, the development of terms — but not of planes — was somewhat different. The 1882 catalogue of an American tool-making company clearly shows that the standard set of bench planes included a jack plane and a fore plane.[52] An American technical dictionary of 1875 makes it clear that in America, as in England, the jack plane was the plane used first to smooth rough wood. The fore plane was the plane employed after the jack plane to further smooth the stuff.[53] The descriptions of the American fore plane in the Chapin catalogue and the English trying plane in Nicholson indicate that they are, in fact, exactly the same — about twenty-two inches long. [54]

In colonial American records, all three names appear: jack plane, fore plane, and trying plane. The writer has not been able to find a single inventory or similar listing, however, that included both fore planes and trying planes. It is likely that seventeenth and early eighteenth-century America terminology followed the English usage indicated in Moxon—the plane we now call a jack plane was called both a jack plane and a fore plane. The twenty-two inch plane designed to follow the jack plane apparently first appeared in the eighteenth century — Moxon makes no mention of such a plane. This plane was, and still is, referred to by the English as the trying plane; in America it was for a time called both a trying plane and a fore plane, but eventually it became known as the fore plane.

The fore plane, or trying plane, then, was a plane about twenty-two inches long. It was meant to be used after the jack plane to give the stuff greater smoothness.

The jack plane. The jack plane, also sometimes called the fore plane (but let's not go into that again), was from fourteen to eighteen inches in length and, at first glance, quite similar to the planes already discussed. Moxon, Chambers, and Mercer all referred to the jack, or fore, plane as one of the basic woodworking tools.[55] It was the plane that was used first on rough-sawn lumber, and its function was to remove the major irregularities. Since this was not precision work and in order to speed things up, the blade of the jack plane was ordinarily set quite rank, or deep. For this reason, there was a basic difference between the jack plane and the other bench planes — the iron of the jack plane was ground with a convex rather than a straight cutting edge. Set rank, a straight-bladed iron would have left sharp-edged grooves in the work, but the convex blade of the jack plane left only shallow hollows that were easy to smooth out.[56] Neither Diderot nor Roubo mentioned any plane that closely resembled the jack plane, but Diderot did picture a tool called simply a plane (rabot).[57] Although it lacked a convex blade — at least no such feature was indicated — this may be the plane that corresponded to the Anglo-American jack plane. Curiously enough, Roubo did illustrate a convex plane iron, but he showed it in connection with a jointer.[58] This must have been a slip, for nothing could make much less sense than a convex-bladed jointer.

The strike block. The next to smallest of the bench planes described by Moxon, this was a small jointer, apparently about ten inches long. It was used for leveling small surfaces and shooting short joints — as, for ex-

ample, a mitre — where the big jointer would have been unwieldy. Moxon mentioned that for some work the plane was held sole up in one hand, and the stuff to be planed was pushed carefully across the blade with the other.[59] Diderot illustrated a mitre plane similar in size and purpose to Moxon's strike block, but no such tool appears in either Roubo or Chambers.[60] Mercer does not include a plane specifically called a strike block, but the small trying planes are essentially the same thing[61]

The smoothing plane. The smallest bench plane, it was about six inches long. Moxon said its iron was always set very fine " . . . because its Office is to smoothen the work from those Irregularities the *Fore - plane* made."[62] This seems to be a somewhat inexact description: for one thing, Moxon had previously assigned to the jointer the role of following the fore plane; for another, a very small plane would seem ill-adapted to this task — it would have a tendency to follow the minor unevenesses rather than the major surface. Chambers agreed with Moxon — so closely, in fact, that Moxon was obviously the source of his statements.[63] Mercer seems to have been right when he called the smoothing plane "poorly named" and said it was used ". . . . not like the trying plane to smoothlevel boards, but to wriggle about into corners, over ill-fitting joints, etc., and so put the last levelling touch upon *finished work*."[64]

Perhaps some order may be restored from this confusion by ignoring conflicting names and explanations and examining the uses to which bench planes were put. The craftsman needed a plane to give a preliminary smoothing to the roughly-sawed and probably somewhat warped stuff he kept in stock. Such a plane was available in the convex-bladed jack plane, and it is safe to assume that this was a basic tool of the colonial cabinetmaker.

After the stuff had received this first dressing it was necessary, for many purposes, that it be given a precise smoothing and squaring. The jointer was capable of such work and was undoubtedly frequently used for it, but the great length of the jointer made it somewhat unwieldy except on large surfaces or long edges. What the cabinetmaker needed was a short version of the jointer and this plane, the fore plane (or trying plane), was very likely one of his basic tools.

To level and true-up large flat surfaces and especially to shoot long edges perfectly straight and square preparatory to jointing, the craftsman had need of a very long plane capable of very precise work. The jointer was just such a plane and unquestionably was in very cabinetmaker's tool set. A small plane to smooth areas, edges, and joints that could not be reached by the larger planes was a requirement also. The smoothing plane met this need, and no doubt most craftsmen owned one.

If this analysis is correct, the basic bench planes of the colonial cabinetmaker were, in descending order of size, the jointer, the fore or trying plane, the jack plane, and the smoothing plane. Unfortunately, inventories, wills, and similar listings are not often in sufficient detail to indicate precisely what was meant. With discouraging regularity such entrys as "5 old plaines" or "gouges, planes, files, &c" occur. But there are some records that are more specific, and they seem to bear out the above-stated conclusions. Among listings of woodworkers' tools, for example, are to be found entries like the following: a long plane, a jack plane, and two smoothing planes;[65] a jointer, four planes, three jack planes, and two smoothing planes;[66] three jointers, five jack planes, and three smoothing planes;[67] a jack plane, a jointer, a fore plane, and a smoothing plane.[68]

Further support for the idea that the basic bench planes of eighteenth-century America were the jointer, fore or trying plane, jack plane, and smoothing plane is to be found in a few other places. In 1773 the Annapolis firm of Shaw and Chisholm offered for sale a very complete assortment of joiners' and cabinetmakers' tools. The bench planes listed in their advertisement were: " . . . jack, trying, smoothing, and jointer planes . . . "[69] Chapin's catalogue indicates that the standard set of bench planes in the late nineteenth century consisted of the jointer, fore, jack and smoothing planes.[70] Frank H. Wildung of the Shelburne Museum said that plane making became a specialized trade in America early in the nineteenth century, but that

> . . . even before this time the general form of the plane seemed to have become settled.
>
> Of the so called bench planes, there was the jack plane, about 18 inches long; the 24" long fore plane and the 30" long joiner plane, as well as the smoothing plane, about 8 inches long.[71]

Of course the eighteenth-century cabinetmaker was not limited in the bench planes he owned by any notions of what constituted "a set" of planes. Planes were made of wood and he was a skilled woodworker. Irons could be made by the local blacksmith or purchased from many shop-keepers. There was nothing to prevent the craftsman from making bench planes — or any others, for that matter — of whatever size seemed most suitable to him. It is, in fact, quite likely that many of the planes used by colonial cabinetmakers were made by the craftsmen themselves.[72]

Inventories, such as those just cited, frequently indicate that many craftsmen owned more than one plane of a type. While this in part may have been simply a matter of having accumulated a few extra planes in the course of the years, there was also a very good reason for it. The acute angle made by the plane iron and the sole of the plane was known as the pitch. By the late seventeenth century, at least, and probably a long time before that, woodworkers had learned that hard woods required a greater pitch than soft woods.[73] The common pitch for soft woods was forty-five degrees, but the York pitch of fifty degrees and the middle pitch of fifty-five worked better on mahogany and other hard woods.[74] It seems to be true, however, that pitches of other than forty-five degrees were more common on moulding planes than on bench planes. Among the eighteenth-century planes owned by Colonial Williamsburg, for example, all of the bench planes have a pitch of forty-five degrees; but most of the molding planes have the York pitch or the middle pitch.

Fitting planes. The second group of planes owned by eighteenth-century cabinetmakers was what Mercer called the fitting planes — those used to prepare wood for fitting together, or joining. Two pieces of wood may be joined at their edges or ends by simply smoothing and truing the surfaces to be joined and then fastening them together with nails, screws, or glue. Such a joint is called a butt joint. However, joints are stronger if the surfaces to be joined are first specially shaped to produce a fitted overlap or to make a projection on one piece that fits snugly into a recess on the other. Most joints in cabinetwork are of this type. To make certain of the special

shapes for joining, colonial cabinetmakers used special planes.

The special shapes that can be made with a plane are all variations of two basic forms: the rabbet and the tongue and groove. The rabbet was described by Moxon as being made by cutting " . . . part of the upper edge of a Board, or other *Stuff*, straight, that is, square down into the Board, that the edge of another Board also cut down in this same manner, may fit and join into the Square of the first Board thus cut away; and when two Boards are thus *lapped* on the edges over one another; this *lapping* over is called *Rabbetting*."[75]

The rabbet plane. The simplest of the fitting planes was the rabbet plane. Its distinguishing features were that it was quite narrow and that the blade was slightly wider than the body of the plane. To accommodate the width of the blade, the mouth was extended clear across the sole and about half-way up the sides — where it was considerably enlarged. The narrow shaft of the spade-shaped iron fit through a correspondingly narrow opening in the body of the plane, and the shavings were discharged from the sides. This somewhat unusual construction was necessary because, in use, the body of the plane had to be able to follow the blade down into the rabbet as it was formed. Moxon, Diderot, Roubo, and Mercer all mention this plane; it was a basic woodworking tool.[76] A slight variation of the basic rabbet was the skew rabbet. The only difference between the two was that the blade of the skew rabbet was mounted at an angle of about sixty degrees to the long axis of the sole rather than at a right angle.

Other variations of the rabbet plane included the addition of fences and stops. A fence was nothing more than a downward projection running the length of the plane along one side of the sole. The fence was sometimes an integral part of the plane body, but it was frequently simply a strip of wood added to an ordinary rabbet plane.[77] In use, one edge of the stuff having first been trued, the fence was slipped over that edge and held firmly against it while the rabbet was planed. The fence served the double purpose of limiting the width of the rabbet and making the side of the rabbet as true as the edge along which the fence was held.

The problem of limiting the depth of the rabbet was frequently solved by the addition of a stop to the plane. The stop was similar to the fence except that it extended outward rather than downward and was located on the side of the plane opposite the fence.[78]

The moving fillister. Designed like the rabbet plane, to cut notches along the edge of a board, the moving fillister was a much larger plane capable of cutting much wider notches. The body of the plane was much like that of a bench plane, but the blade was set askew and was sharpened on the leading edge as well as on the bottom. The feature of the moving fillister was an adjustable fence. The fence was slotted near each end and attached to the sole of the plane by screws or bolts that fit through the slots. The screws could be loosened, the fence adjusted, and the screws then tightened. Many moving fillisters had a similar, adjustable stop, and some also had a routing blade, or tooth—a small iron set vertically in the body just ahead of the leading edge of the iron.[79] The purpose of the routing tooth was to score the wood so the iron would not tear it — a valuable feature for working across the grain.

The plow. One of the two fitting planes described in detail by Moxon — the other was the rabbet — the plow was a rather complex plane with a simple purpose. The purpose was to cut a groove in or near the edge of a board. Basically, the plane was simply a very narrow rabbet plane, but the requirements of the task for which it was designed necessitated several refinements. The narrow blade had, of course, no great strength; so it was necessary to reinforce it. This was accomplished in two ways: the iron itself was made considerably thicker than normal near the cutting edge, and the sole of the plane was strengthened by letting into it a strip of thin iron—both of these measures serving to help keep the cutting iron firm and steady. To permit centering the groove in the edges of boards of various sizes, a movable fence was required. This problem was met by mounting the fence on two shafts, or staves, square in cross section and four or five inches long, that fit into two corresponding through mortises in the body of the plane. By tapping the shafts one way or the other and then wedging them right, the craftsman could adjust the fence to suit his work.[80]

Simpler forms of the plow existed of course, but the one described seems to have been a standard fitting plane. It was mentioned, not only by Moxon, but by Diderot, Roubo, and Chambers as well.[81] Mercer pictured two plows — of undetermined age, but probably nineteenth century — that were nothing more than very narrow rabbet planes with fences and stops, but with the characteristic thick blade and reinforced sole of the true plow.[82] Diderot and Roubo both illustrated simple planes with fixed fences designed to make narrow grooves, but the French planes lacked the reinforcing elements.[83]

The tongue. Complementing the plow was a very similar plane called the tongue. Whereas the plow made a groove in the edge of a board, the tongue shaped on another board, the corresponding projection that fit into the groove. The plane was wider than a plow—more on the order of a rabbet plane — and had deep rectangular notches in its sole and iron. The notches, of course, served to shape the projection, or tongue (both the plane and the projection it formed were called tongues), and to limit its height.[84] As with the plow, there were simple forms of the tongue that lacked an adjustable fence.[85] Naturally, the simple forms of the tongue and plow were of use only in matched pairs, and items such as " . . . one pair of half-inch groving planes . . ." or " . . .2 match plain . . ." are frequently found in inventories and advertisements of the eighteenth century.[86] A double match plain had a plow iron and a tongue iron mounted side by side, but facing in opposite directions, in the same body — in effect, a simple plow and matching tongue all in one plane.[87]

The molding planes. Although they varied widely in size and appearance, the molding panes all had the same purpose: to produce, in one operation, the frequently complex arrangement of curved and flat surfaces that comprise a molding. Most molding planes were rather small; in size and construction they closely resembled a rabbet plane. The big difference, of course, lay in the shape of the cutting edge of the iron and the shape of the sole. The sole of a molding plane was an inverted image of the molding the plane was intended to make, and the iron was carefully ground and shaped to produce exactly the same profile.[88] The variety of shapes that moldings may take is

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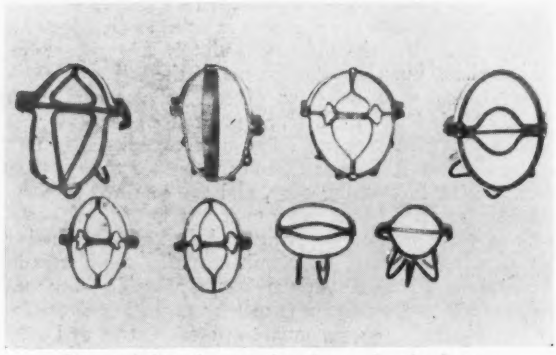
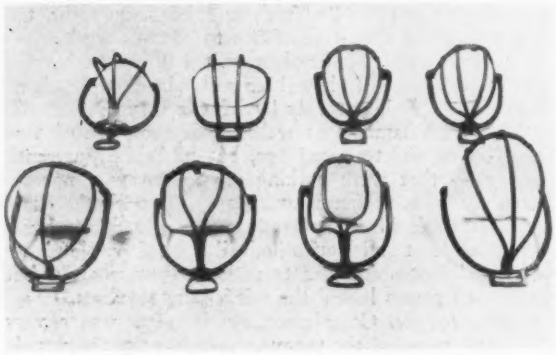
Some Interesting Stirrups



Same eight stirrups showing only the bottom.



Front view of same eight stirrups.

Notes on Planes

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enormous, and most cabinetmakers had a good number of molding planes: twenty-five or thirty was not uncommon. Of course, four or five basic molding planes might be used in various combinations to produce a great number of different moldings, but many craftsmen apparently felt that it was simpler to own a large number of molding planes.

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Publications Committee

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or subsidizing publications in our field.

Under the direction of Mr. Edward Durrell, a manuscript is to be edited on the "Pitt" or Conestoga Type Wagon and published under the auspices of the Early American Industries Association.

Mr. Raymond Townsend presented a tentative outline of a catalogue on shoemaking tools. This outline was accepted as a tentative start on such a project to be the first of a series, and an initial grant of funds was made available for the development of such a publication. As in the case of all publications, it is the Committee's desire to secure outside subsidization where possible in the publication of such projects.